Hiroyoshi OHASHI: New Combinations in *Hylodesmum* (Leguminosae)
ヌスビトハギ類の学名新組合せ（大橋広好）

Following new combinations for four infraspecific taxa of *Hylodesmum podocarpum* (DC.) H.Ohashi & R.R.Mill are proposed: subsp. *fallax* f. *album* (Sugim.) H.Ohashi, subsp. *oxyphyllum* var. *japonicum* (Miq.) H.Ohashi, subsp. *oxyphyllum* var. *japonicum* f. *albiflorum* (Iwata) H.Ohashi, and subsp. *oxyphyllum* var. *japonicum* f. *decorum* (Iwata) H.Ohashi.

Recently Ohashi (1999) and Ohashi and Mill (2000) recognized most of the members of *Desmodium* subgenus Podocarpium (Benth.) H.Ohashi (1973) as a distinct genus from the genus *Desmodium*, and made necessary new combinations for all species and infraspecific taxa above the rank of variety. Several taxa at the rank of form remain still in *Desmodium* and one variety requires a correct name based on the earliest name at the rank of variety. The following new combinations for infraspecific taxa of *Hylodesmum podocarpum* are therefore necessary.

Hylodesmum podocarpum (DC.) H.Ohashi & R.R.Mill subsp. **fallax** (Schindl.) H.Ohashi & R.R.Mill in Edinburgh J. Bot. **57**: 182 (2000).

f. **album** (Sugim.) H.Ohashi, comb. nov.

Desmodium racemosum var. *dilatatum* f. *album* Sugim., Key Herb. Jap. Dicot. 734 (1965).

Desmodium podocarpum subsp. *fallax* f. *album* (Sugim.) H.Ohashi in J. Jpn. Bot. **52**: 96 (1977).

Hylodesmum podocarpum subsp. **oxyphyllum** (DC.) H.Ohashi & R.R.Mill in Edinburgh J. Bot. **57**: 182 (2000).

var. **japonicum** (Miq.) H.Ohashi, comb. nov.

Desmodium japonicum Miq. in Ann. Mus. Bot. Lugd. Bat. **3**: 46 (1867), p. p.

Desmodium podocarpum var. *japonicum* (Miq.) Maxim. in Bull. Acad. Imp. Sci. Saint-Pétersb. **33**: 30 (1886), p. p. et in Mél. Biol. **12**: 441 (1886), p. p., incl. typica polyphylla et parvifolia.

Desmodium oxyphyllum var. *japonicum* Matsum. in Ito & Matsum., Tent. Fl. Lutch.: 415 (1899) (non *D. japonicum* Miq.).

Desmodium racemosum var. *ramosum* Nakai in Bot. Mag. Tokyo **44**: 32 (1930).

Desmodium racemosum var. *pubescens* Metcalf in Lingnan Sci. J. **19**: 605 (1940).

Desmodium podocarpum subsp. *oxyphyllum* (DC.) H.Ohashi in Hara, Fl. E. Himal. **2**: 65 (1971), & in Ginkgoana **1**: 150 (1973); in Satake & al., Wild Flow. Jap. Herb. **2**: 204 (1982); Ono & al., Rev. New Makino 330 (1989), as var. *oxyphyllum*; Shimab., Check List Ryukyu rev. ed.: 249 (1997).

Podocarpium podocarpum var. *oxyphyllum* (DC.) Y.C.Yang & P.H.Huang in Bull. Bot. Lab. North-East. Forest. Inst. **4**: 9 (1979), & in Fl. Reip. Popul. Sin. **41**: 55 (1995).

Podocarpium podocarpum var. *japonicum* (Matsum.) P.H.Huang in Bull. Bot. Res. **18**: 6 (1998).

f. **albiflorum** (Iwata) H.Ohashi, comb. nov.

Desmodium podocarpum var. *albiflorum* Iwata in Bot. Mag. Tokyo **54**: 73 (1940).

Desmodium oxyphyllum f. *albiflorum* (Iwata) Sugim., Shizuoka-ken Shokubutsushi: 279 (1967).

Desmodium podocarpum f. *albiflorum* (Iwata) H.Ohashi in J. Jpn. Bot. **52**: 96 (1977).

f. **decorum** (Iwata) H.Ohashi, comb. nov.

Desmodium podocarpum f. *decorum* Iwata in Bot. Mag. Tokyo **54**: 73 (1940); H.Ohashi in J. Jpn. Bot. **52**: 96 (1977) & in Satake et al., Wild Flow. Jap. Herb. **2**: 204 (1982).

Desmodium oxyphyllum DC. f. *decorum* (Iwata) Sugim., Shizuoka-ken Shokubutsushi: 279 (1967).

References

Ohashi H. 1973. The Asiatic species of *Desmodium* and its allied genera (Leguminosae). Ginkgoana No. 1, 318 pp. +76 pls. Academia Scientific Book Co., Tokyo.

—— 1999. The genera, tribes and subfamilies of Japanese Leguminosae. Sci. Rep. Tohoku Univ., 4th ser. (Biology) **40**: 186–269.

—— and Mill R. R. 2000. *Hylodesmum*, a new name for *Podocarpium* (Leguminosae). Edinburgh J. Bot. **57**: 171–188.

ヌスビトハギ（広義）*Hylodesmum podocarpum* (DC.) H.Ohashi & R.R.Mill の種内分類群の中でシロバナケヤブハギ subsp. *fallax* f. *album* (Sugim.) H.Ohashi, ヌスビトハギ subsp. *oxyphyllum* var. *japonicum* (Miq.) H.Ohashi, シロバナヌスビトハギ f. *albiflorum* (Iwata) H.Ohashi, オキチハギ f. *decorum* (Iwata) H.Ohashi の新組合せを行なった．ヌスビトハギの変種ランクでの学名は *Desmodium podocarpum* var. *japonicum* (Miq.) Maxim. (1886) が最も早く発表されたのでこの変種形容語を使わねばならなかったが，Ohashi and Mill (2000) ではこれを見落としたので，訂正する．

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SINGH B. P.: **Diversity of Vascular System in the Wall of Inferior Ovary in the Family Asteraceae**

キク科下位子房壁における維管束システムの多様性（B. P. シン）

The Asteraceae, comprising about 1200 genera and 25000 species, is one of the largest family of flowering plants. The great homogeneity of the Asteraceae is displayed by their possession of capitulum inflorescence as well as the peculiar plan of floret which even when divorced from the mother plant could in no case be mistaken from anything else (Good 1956, Leppik 1960). To a student of evolutionary morphology of Angiosperms, Asteraceae flower presents several thoughts provoking problems. The evolution of collora, nature of pappus, placentation, floral evolution and inferior ovary are the subject of acrimonious debate and has already being reviewed in the earlier papers (Tiagi and Singh 1972, Singh 1973, 1994, 1998, 1999, Singh and Irvinder 1998a, 1998b) and would be referred to at appropriate places in the text. The present work was undertaken with a view to enlighten the evolution of vascular system in the wall of inferior ovary in the family Asteraceae.

Materials and Methods

In the present work, vascular anatomy of the flowers of 16 species of the family Asteraceae has been investigated. These are listed in Table 1.

Customary methods of microtechnique were used. Serial transverse and longitudinal sections of the florets and capitula were cut at the thickness ranging from 7 to 15 μm. Double staining with crystal violet and erythrosine gave satisfactory results. In all cases the floral buds were cleared by warming in 10 % solution of potassium hydroxide and subsequently in colorless lactic acid. The cleared buds were dissected under a stereomicroscope. This was found to be very useful in understanding 3-dimensional picture of the vascular skeleton. The author has investigated floral anatomy of approximately 250 species of the Asteracese, the plant specimens and slides are preserved in the Herbarium, Post-Graduate Department of Botany, S G N Khalsa College, Srigan-